

**[EXTERNAL] Feedback / questions Projections PR Boa**

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To: Anna Tucker <amt0046@auburn.edu>

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Hi Anna,

Hope all is well. Thanks for sending the draft, I think the methodology is well explained because I understood the process. Some of my own questions were answered once I saw the pdf version of how the models were made. However, I still have a few questions:

1. On the Stable stage distribution paragraph (page 3 in word and page 2 in pdf): The initial number either in natural habitat or urban habitat is calculated by using the initial natural or urban population and the proportion in each stage. How was the proportion in each obtained from the table given in page 2 of pdf (values are 0.481 for young, 0.202 for juvenile, 0.164 for subadult and 0.153 for adult)?
2. On temporal variation in demographic rates paragraph (page 5 of word document): Do fecundity rates that were drawn in the report take into consideration that a female produces biennially? Is this even something that can be taken into consideration in the fecundity input on Table 1 (page 2 word document)?
3. On differences between natural and urban habitat paragraph (page 5 of word document and pg 4 pdf): Why assume 10% and not more or less?  
Also, can road density or human population(census) be included in the models? Although there is no study on road mortalities, several papers do report amount of dead boas on road or collect their specimens from road mortalities. So, road is a habitat quality factor. Is there a way to include road density as a risk factor? Or is it unnecessary because the 10% takes into consideration that risk factor?
4. On population projection paragraph (page 6 of word document): How do you determine the amount of replications? You projected the population for 10,000 replications per scenario. Is this a standard for this type of modelling? Could you maybe direct me to a paper that I can read about this so I can further expand my knowledge in this area?
5. Population size (page 8 pdf): What do the colors in that projection mean?

#### Observations:

I think you've explained everything very well and yes I have some minor questions that when I understand them will make everything more clearer.

Also, in the final report will there be a map that can present the population projections so that it can be more easily interpreted? Just asking because usually these decision making processes involve public that does not have the level of expertise you have concerning statistical analysis? I am just asking because I have read SSA for other animals and some of those reports have maps with the projections.

I am so sorry I forgot to read the docuemnts the week you sent it. Thanks for all the work you do by taking the oinions/feedback with the data available to produce results.

Have a nice day :)

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